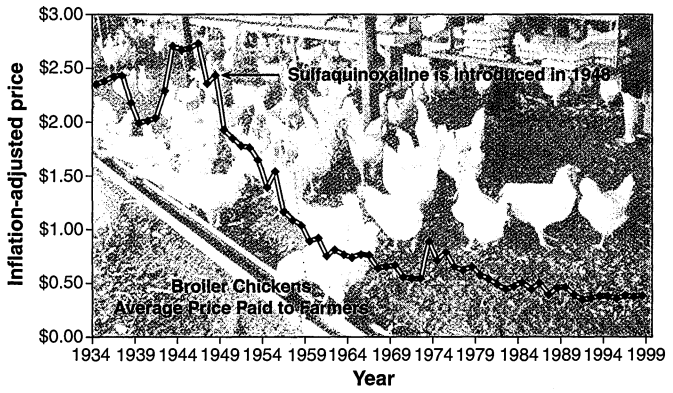

Average price received by farmers for broiler chickens (in dollars per live-weight pound) from 1934 to 1998. The data are adjusted for inflation and show prices in 1998 dollars (*4*, *5*). The arrow indicates sulfaquinoxaline's introduction in 1948 as a coccidiostat.

SOURCE: BACKGROUND IMAGE, USDA

fonamides in the prevention of coccidiosis; control of *Eimeria* infection is now largely dependent on monensin and related ionophores. However, a sea change in agricultural practice was precipitated by the introduction of sulfaquinoxaline and its analogs. Therefore, one might wonder if the sulfonamide class has benefited humankind more by the provision of plentiful and inexpensive dietary protein than by the cure of specific illnesses directly.

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References and Notes

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4. The data are from *Agricultural Prices* [U.S. Department of Agriculture, National Agricultural Statistical Service (NASS), Washington, DC]. Inflation correction factors to adjust the historical data to 1998 prices were listed at http://www.orst.edu/Dept/pol_sci/fac/sahr/sahr.htm, a Web site maintained by Robert C. Sahr (Oregon State University), which is part of the "Resources for Economists" Web site available at http://rfe.wustl.edu/EconFAQ.html
5. Thanks to D. Kennerson and K. Bruce of NASS for their assistance in obtaining the historical price data, and to H. Geer and R. Nolan for their advice on correcting these data for inflation.

Response

Navia raises an interesting point, quite apart from the medical uses of sulfonamide drugs. As to whether this class of drugs has perhaps been more beneficial in the provision of plentiful and affordable dietary protein than in the treatment of human diseases, I don't know the answer. As I pointed out in my Review article, however, sulfonamides were not only important as antibacterial drugs in their own right but also as the starting point for many structurally related but functionally diverse classes of drugs: diuretics, antidiabetic drugs, and antihypertensives. Sulfonamides continue to be valuable drugs in the treatment of microbial infections, although the emergence of resistance has reduced their usefulness. It may well be that the use of sulfonamides in the prevention of coccidiosis has accelerated the generation of resistance in medically relevant bacterial strains.

The history of sulfonamides is one of many examples that argue in favor of a strict separation of antibiotics for medical uses on the one hand, and for uses in animal nutrition or the mass treatment of livestock on the other. The latter uses often entail broad and uncontrolled exposure of the environment to antibiotics with consequences that are difficult to manage.

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CORRECTIONS AND CLARIFICATIONS

News of the Week: "In contrast to Dolly, cloning resets telomere clock in cattle" by Gretchen Vogel (28 Apr., p. 586). The credit for the upper right photo should have read, "Peter Lansdorp, Terry Fox Laboratory, Vancouver."

Reports: "Rapid progression to AIDS in HIV$^+$ individuals with a structural variant of the chemokine receptor CX_3CR1" by S. Faure *et al.* (24 Mar., p. 2274). The values for the variables RR (relative risk) and *P* (probability) listed in Fig. 1B were incorrect. They should have been RR = 2.44 and $P = 0.016$, as stated in the text. And in Fig. 2, the black circles are data for the haplotype I249 M280, not I249 T280.

Random Samples: "Guinea worm banished from India" (17 Mar., p. 1917). The organism that nurtures Guinea worm eggs, *Cyclops*, is a crustacean (subclass Copepoda), not an aquatic insect.

Reports: "A piston model for transmembrane signaling of the aspartate receptor" by K. M. Ottemann *et al.* (10 Sept. 1999, p. 1751). In the legend for Fig. 4, the descriptions of the thick solid line and dashed line were reversed. The second sentence should have read, "Spectra in the presence (dashed line) and absence (thick solid line) of aspartate when the aspartate receptor is mixed with equimolar amounts of CheA and CheW."